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ALIX YALE & RISTAS LLP 750 MAIN STREET SUITE 1400 HARTFORD, CT 06103			EXAMINER BOYD, JENNIFER A	
			ART UNIT 1771	PAPER NUMBER

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Applicati n N .	Applicant(s)	
	09/869,745	WIGHTMAN ET AL.	
	Examin r	Art Unit	
	Jennifer A. Boyd	1771	

-- The MAILING DATE f this c mmunicati n appears on th cov r sheet with the c rrespondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 22 and 24-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22 and 24-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Reopening of Prosecution After Appeal*

1. In light of the Board of Patent Appeals and Interferences reversal of the Examiner's rejections as detailed in the Examiner's Answer dated August 26, 2005, prosecution has been reopened.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 37 – 38 and 42 – 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen (US 3,922,424).

Andersen is directed to a non-woven fibrous material (Title) suitable for many applications including wrappings for food products (column 8, lines 1 – 10).

As to claims 37 and 42, Andersen teaches that the bonded nonwoven fibrous product can be formed of either natural or synthetic fibers *or any combination thereof* with the selection of the fiber merely depending on the specific end use. Andersen teaches suitable natural fibers, or Applicant's "cellulosic fibers", are jute, sisal, hemp and cotton and suitable synthetic fibers, or Applicant's "synthetic fibers", are polyethylene, polypropylene, polyester and polyamides (column 4, lines 25 – 40). Andersen teaches applying a bonding agent by means of surface application, submersion or impregnating (column 6, lines 30 – 55).

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As to claim 38, Andersen teaches the use of natural fibers such as jute, sisal, hemp and cotton. According to Applicant's Specification, jute and sisal are vegetable fibers.

As to claim 43, Andersen teaches that the bonded nonwoven fibrous web can be made by a papermaking process (column 5, lines 50 – 60); it is known in the art that this is equivalent to a wet-laying method.

***Claim Rejections - 35 USC § 102/103***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 22, 24, 28 - 29, 31 - 32, 34 and 36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Andersen (US 3,922,424).

Andersen is directed to a non-woven fibrous material (Title) suitable for many

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applications including wrappings for food products (column 8, lines 1 – 10).

As to claims 22, 29 and 34, Andersen teaches that the bonded nonwoven fibrous product can be formed of either natural or synthetic fibers *or any combination thereof* with the selection of the fiber merely depending on the specific end use. Andersen teaches suitable natural fibers, or Applicant's "cellulosic fibers", are jute, sisal, hemp and cotton and suitable synthetic fibers, or Applicant's "synthetic fibers", are polyethylene, polypropylene, polyester and polyamides (column 4, lines 25 – 40). Andersen teaches applying a bonding agent by means of surface application, submersion or impregnating (column 6, lines 30 – 55).

As to claim 24, Andersen teaches the use of natural fibers such as jute, sisal, hemp and cotton. According to Applicant's Specification, jute and sisal are vegetable fibers.

As to claim 28 and 31, Andersen teaches that the bonded nonwoven fibrous web can be made by a papermaking process (column 5, lines 50 – 60); it is known in the art that this is equivalent to a wet-laying method.

As to claim 32, Andersen teaches applying a bonding agent by means of surface application, submersion or impregnating (column 6, lines 30 – 55); the Examiner equates this to Applicant's "binder".

As to claim 36, Andersen teaches drying the nonwoven fibrous material by conventional means known in the art to remove all or a portion of the water and to effect coalescence and fusion of the interpolymer within the nonwoven fibrous material (column 6, lines 45 – 55). Although Wielockx does not specifically teach drying by means of a plurality of heated cylinders, the Examiner submits that the product limitations of the claim are met. It should be

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noted that the method of forming the product given that the product is structurally the same is not germane to the issue of patentability of the product.

As to claims 22 and 29, although Andersen does not explicitly teach the claimed lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers, it is reasonable to presume that the lower cross direction wet expansion value is inherent to Andersen. Support for said presumption is found in the use of like materials and like processes (i.e. a wet-laid paper made with a combination of vegetable fibers and synthetic fibers such as polyester, nylon or polyolefin impregnated with a binder) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers would obviously have been present once the Andersen product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

7. Claims 22, 24, 28 – 29 and 31 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Heyse, et al. (US 3,822,182).

Heyse, et al. is directed to an open or porous paper stock suitable for use as a food casing (column 1, lines 35 – 45).

As to claims 22 and 29, Heyse teaches a paper can be made comprising abaca admixed with various proportions of other natural or man-made fibers, including nylon (polyamide) and

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polyester (column 3, lines 69 – 75 and column 4, lines 1 – 5). Heyse teaches that the fiber selection depends on the desired end use (column 3, lines 70 – 75).

As to claim 24, Heyse teaches that the paper can comprise abaca (column 3, lines 69 – 75).

As to claims 28 and 31, Heyse teaches manufacturing the paper by a wet paper-making process (column 2, lines 45 – 50).

As to claims 22 and 29, although Heyse does not explicitly teach the claimed lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers, it is reasonable to presume that the lower cross direction wet expansion value is inherent to Heyse. Support for said presumption is found in the use of like materials and like processes (i.e. a porous substrate made of a paper comprising abaca fibers and synthetic fibers such as nylon or polyester made by a wet-laying process) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers would obviously have been present once the Heyse product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

8. Claims 22, 24 and 28 – 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ito et al. (US 5,705,214).

Ito is directed to a food component transfer sheet (Title) which can be made into tubular

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form to cover sausages (column 4, lines 50 – 60); the Examiner equates this to a “sausage casing”.

As to claims 22 and 29, Ito teaches creating a nonwoven fabric or paper comprising natural fibers such as plant fibers and semi-synthetic and/or synthetic fibers such as polyester and nylon (column 3, lines 15 – 25). It should be noted that Ito uses the term “and” implying that a combination or blend of natural and synthetic fibers can be present.

As to claim 24, Ito teaches that plant fibers may be used (column 3, lines 15 – 20); the Examiner equates this to Applicant’s “vegetable fibers”.

As to claim 28, although Ito does not specifically teach that the paper or nonwoven fabric can be made by a wet-laid process, the Examiner submits that the product limitations of the claim are met. It should be noted that the method of forming the product given that the product is structurally the same is not germane to the issue of patentability of the product.

As to claims 22 and 29, although Ito does not explicitly teach the claimed lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers, it is reasonable to presume that the lower cross direction wet expansion value is inherent to Ito. Support for said presumption is found in the use of like materials (i.e. a porous substrate made of a paper comprising natural fibers such as plant fibers and synthetic fibers such as nylon or polyester) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a lower cross direction wet expansion compared to a similar web material



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comprising only the same cellulosic fibers would obviously have been present once the Ito product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

9. Claims 22 and 24 – 32 are rejected under 35 U.S.C. 102(a)(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ferreira et al. (US 6,762,138).

Ferreira is directed to a wet-laid nonwoven web from unpulped natural fibers (Title).

As to claims 22 and 29, Ferreira teaches a nonwoven web made from natural pulp, man-made fibers and a predominant amount of unpulped natural fiber bundles (column 3, lines 14 – 25). Ferreira teaches that the unpulped fiber can comprise sisal, abaca, kenaf, henequen and jute (column 4, lines 10 – 20), the man-made fibers can comprise nylon (polyamide), polyester and polyolefin fibers such as polypropylene (column 3, lines 25 – 40).

As to claim 24, Ferreira teaches that the unpulped fibers can comprise abaca and other vegetable fibers such as kenaf, henequen and jute (column 4, lines 10 – 20),

As to claims 25 and 30, Ferreira teaches that the natural pulp can comprise pulp made from various woods such as spruce, hemlock, cedar and pine (column 3, lines 15 – 25). The pulp may be present in an amount up to 40% (column 3, lines 20 - 25).

As to claims 26 - 27, Ferreira teaches that the synthetic fiber can comprise 5 – 15% of the web (column 3, lines 60 – 65).

As to claims 28 and 31, Ferreira teaches that the web is wet-laid (Title).

As to claim 32, Ferreira teaches that the nonwoven may be enhanced for use by the addition of a suitable binder (column 4, lines 60 – 68) by wet-end additions (column 5, lines 1 – 9) which implies a saturation or impregnation process.

As to claims 22 and 29, although Ferreira does not explicitly teach the claimed lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers, it is reasonable to presume that the lower cross direction wet expansion value is inherent to Ferreira. Support for said presumption is found in the use of like materials (i.e. a porous substrate made of a paper comprising natural fibers such as plant fibers and synthetic fibers such as nylon or polyester made by wet-laying process) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers would obviously have been present once the Ferreira product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

### ***Claim Rejections - 35 USC § 103***

10. Claims 26 – 27 and 40 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen (US 3,922,424).

As to claims 26 – 27 and 40 – 41, Andersen fails to disclose that the synthetic fibers are present in an amount ranging from 0.5 – 20% by weight as required by claims 26 and 40 and from 3 – 9% by weight as required by claims 27 and 41. Andersen notes that the selection of the fiber depends on the specific end use of the product (column 4, lines 25 – 40). In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of synthetic fibers based on the required strength

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and other characteristics which are consistent with the properties of casings since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of synthetic fibers in the paper motivated by the desire to optimize the strength and other characteristics making it suitable for a casing material.

11. Claims 26 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyse, et al. (US 3,822,182).

As to claims 26 – 27, Heyse fails to disclose that the synthetic fibers are present in an amount ranging from 0.5 – 20% by weight as required by claim 26 and from 3 – 9% by weight as required by claim 27. Heyse notes that the fiber selection is based on the intended use (column 3, lines 65 – 75). In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of synthetic fibers based on the required strength and other characteristics which are consistent with the properties of casings since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of synthetic fibers in the paper motivated by the desire to optimize the strength and other characteristics making it suitable for a casing material.

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12. Claims 26 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 5,705,214).

As to claims 26 – 27, Ito fails to disclose that the synthetic fibers are present in an amount ranging from 0.5 – 20% by weight as required by claim 26 and from 3 – 9% by weight as required by claim 27. In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of synthetic fibers based on the required strength and other characteristics which are consistent with the properties of casings since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of synthetic fibers in the paper motivated by the desire to optimize the strength and other characteristics making it suitable for a casing material.

13. Claims 26 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferreira et al. (US 6,762,138).

As to claims 26 – 27, Ferreira fails to disclose that the synthetic fibers are present in an amount ranging from 0.5 – 20% by weight as required by claim 26 and from 3 – 9% by weight as required by claim 27. In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of synthetic fibers based on the desired strength and other mechanical characteristics since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the

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optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of synthetic fibers in the paper motivated by the desire to optimize the strength and other mechanical characteristics.

14. Claims 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kastl et al. (US 4,623,566).

Kastl is directed to a smoke-permeable film of fiber-reinforced regenerated cellulose for producing tubular casings, in particular sausage casing (Title).

As to claim 42, Kastl teaches a fiber-reinforcement in the web of a paper, for example, a paper web, composed of natural fibers such as hemp or flax fibers or synthetic fibers such as polyamide or polyester fibers (column 6, lines 45 - 55). It should be noted that, according to Applicant's Specification, flax fibers are considered to be vegetable fibers. Kastl teaches that the fiber web is treated on both sides with a viscose solution, preferably by immersion in a viscose solution, and then converted into regenerated cellulose. Kastl notes that the viscose solution can contain about 10 – 80% by weight of reinforcing fibers such as synthetic fibers, natural fibers or cotton fibers (column 6, lines 50 - 69). It should be noted that the final web would contain the reinforcing fibers as well as the original fibers from the web.

As to claim 44, Kastl teaches using heated rollers to dry the web (column 11, lines 60 – 69 and column 12, lines 1 – 15).

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Although Kastl does not provide clear motivation for using a combination of both cellulose fibers and synthetic fibers, both the use of cellulose fibers and synthetic fibers are disclosed as being suitable fibers for the web of Kastl. The Applicant has not identified any benefits that would be provided by combining cellulose fibers and synthetic fibers or provided any results that would distinguish the claimed paper from the web of the prior art. Furthermore, it has been held that absent any evidence to the contrary, it is submitted that Applicant's combination of cellulose and synthetic fibers is an obvious combination of configurations already established in the art. See *In re Dailey and Eilers*, (CCPA) 149 USPQ 47.

15. Claims 22, 24 – 30, 32 – 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wielockx et al. (US 6,395,356) in view of Heyse, et al. (US 3,822,182).

Wielockx is directed to a food casings having modified release properties and methods of manufacture (Title). Wielockx teaches specifically the use of the casing as a sausage casing (column 5, lines 10 – 15).

As to claims 22 and 29, Wielockx teaches that the fibrous reinforcements for the casing are prepared from fibers approved for use in food wrapping applications. Wielockx teaches the use of cellulosic fibers such as hemp, cotton, wood and their derivatives (column 5, lines 25 – 35). Wielockx teaches that other desirable reinforcements may be prepared in addition to the cellulosic fibers such as soft wood fibers. Wielockx also teaches the use of woven, nonwoven and spun fibers such as polyesters and polyamides (column 5, lines 35 – 50). Wielockx notes that the reinforcement of choice is the most economical web which will impart the required strength

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and other characteristics which are consistent with the properties of the casings described herein (column 5, lines 25 – 45).

As to claim 24, Wielockx teaches the use of hemp fibers which are considered to be a type of vegetable fiber in the art.

As to claim 28, Wielockx does not specifically teach that the paper or nonwoven can be made by a wet-laid process, the Examiner submits that the product limitations of the claim are met. It should be noted that the method of forming the product given that the product is structurally the same is not germane to the issue of patentability of the product.

As to claims 32 - 33, Wielockx teaches impregnating the fibrous substrate with a composition comprising viscose solution and a polymeric adhering agent (column 5, lines 50 – 65). It should be noted that the Examiner equates the adhering agent to Applicant's "binder". Wielockx teaches impregnating the composition into the substrate, regenerating the cellulose and forming a casing material (column 7, lines 10 – 30).

As to claims 34, 37 and 42, Wielockx teaches that the fibrous reinforcements for the casing are prepared from fibers approved for use in food wrapping applications. Wielockx teaches the use of cellulosic fibers such as hemp, cotton, wood and their derivatives (column 5, lines 25 – 35). Wielockx teaches that other desirable reinforcements may be prepared in addition to the cellulosic fibers such as soft wood fibers. Wielockx also teaches the use of woven, nonwoven and spun fibers such as polyesters and polyamides (column 5, lines 35 – 50). Wielockx notes that the reinforcement of choice is the most economical web which will impart the required strength and other characteristics which are consistent with the properties of the casings described herein (column 5, lines 25 – 45). Wielockx teaches impregnating the fibrous

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substrate with a composition comprising viscose solution and a polymeric adhering agent (column 5, lines 50 – 65). It should be noted that the Examiner equates the adhering agent to Applicant's "binder".

As to claim 35, Wielockx teaches impregnating the composition into the substrate, regenerating the cellulose and forming a casing material (column 7, lines 10 – 30).

As to claim 36, Wielockx teaches that the fibrous casing is passed through gas fueled hot air dryers and subsequently rolled onto reels (column 7, lines 10 – 30). Although Wielockx does not specifically teach drying by means of a plurality of heated cylinders, the Examiner submits that the product limitations of the claim are met. It should be noted that the method of forming the product given that the product is structurally the same is not germane to the issue of patentability of the product.

As to claim 38, Wielockx teaches the use of hemp fibers which are considered to be a type of vegetable fiber in the art.

As to claims 22, 29, 34, 37 and 42, Wielockx teaches the use of cellulosic fibers such as hemp, cotton and wood and synthetic fibers such as polyesters and polyamides but fails to specifically disclose the use of the combination of both cellulosic fibers and synthetic fibers. As to claim 37, Wielockx requires the use of at least one organic polymers selected from polyester, polyester copolymer, polyamide, polyamide copolymer, polyolefin and polyolefin copolymer. As to claims 25, 30 and 39, Wielockx fails to teach the inclusion of at least some woodpulp fibers in an amount of up to 50% by weight of the total weight of the cellulosic and synthetic fibers.



Heyse, et al. is directed to an open or porous paper stock suitable for use as a food casing (column 1, lines 35 – 45). Heyse teaches a wet-laid paper can be made comprising abaca admixed with various proportions of other natural, including jute, caroa, sisal or various wood pulps such as bleached or unbleached kraft may be used, or man-made fibers, including nylon (polyamide) and polyester (column 3, lines 69 – 75 and column 4, lines 1 – 5). Heyse teaches that the fiber selection depends on the desired end use (column 3, lines 70 – 75).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine cellulosic fibers with synthetic fibers as suggested by Heyse in the fibrous casing of Wielockx motivated by the desired end requirements of the casing including strength and other characteristics which are consistent with the properties of the casings described herein (Wielockx, column 5, lines 25 – 45 and Heyse, column 3, lines 70 - 75).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wood pulp fibers as suggested by Heyse in the fibrous casing of Wielockx motivated by the desired end requirements of the casing including strength and other characteristics which are consistent with the properties of the casings described herein (Wielockx, column 5, lines 25 – 45 and Heyse, column 3, lines 70 - 75).

As to claims 25 – 27 and 39 – 41, Wielockx in view of Heyse fails to disclose that the synthetic fibers are present in an amount ranging from 0.5 – 20% by weight as required by claims 26 and 40, from 3 – 9% by weight as required by claims 27 and 41 and woodpulp fibers in an amount up to 50% as required by claims 25 and 39. However, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the

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invention was made to optimize the amount of synthetic fibers and woodpulp fibers based on the required strength and other characteristics which are consistent with the properties of casings since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the amount of synthetic fibers and woodpulp fibers in the paper motivated by the desire to optimize the strength and other characteristics making it suitable for a casing material.

As to claims 22 and 29, although Wielockx in view of Heyse does not explicitly teach the claimed lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers, it is reasonable to presume that the lower cross direction wet expansion value is inherent to Wielockx in view of Heyse. Support for said presumption is found in the use of like materials (i.e. a porous substrate made of a paper comprising natural fibers such as plant fibers and synthetic fibers such as nylon or polyester made by wet-laying process) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a lower cross direction wet expansion compared to a similar web material comprising only the same cellulosic fibers would obviously have been present once the Ferreira product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

### ***Response to Arguments***


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16. Applicant's arguments with respect to claims 22 and 24 – 44 have been considered but are moot in view of the new ground(s) of rejection.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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